

REMARKS

Claims 11-18, 20, 71 and 75 are pending. Claims 1-10, 19, 21-70, 72-74, 76-80 are canceled.

Support for the amendment to claim 11 is found in as-filed, now canceled claim 20.

Claims 11-14,17,18 stand rejected under 35 USC 102 as being anticipated by US Patent No. 6,533,804 ("Dobak").

As claim 11 and claims depending therefrom now contain the "ultrasound" limitation of claim 20, and claim 20 was not rejected in the latest Office Action as anticipated by Dobak, this rejections should be withdrawn.

Claims 15 and 16 stand rejected under 35 USC 103 as being unpatentable over US Patent No. 6,533,804 ("Dobak") in view of US patent No. 5,411,509(Hilal).

As claims 15 and 16 depend from claim 11, and claim 11 now contains the "ultrasound" limitation of claim 20, the Examiner has admitted that Dobak does not teach the use of ultrasound, and the Examiner has used Hilal only for its teaching of a foam, this rejection should be withdrawn.

Claims 20, 71 and 75 stand rejected under 35 USC 103 as being unpatentable over Dobak in view of US Patent No. 6,427,089 (Knowlton).

The Examiner has taken the position that to have provided the Dobak device with ultrasonic transducers to provide heat energy to a fluid within the heat transfer catheter would have been an obvious modification, since Knowlton teaches of the known use of such energy sources to provide heat energy to heat transfer catheters.

Applicants respectfully traverse, and submit that the proposed combination does not teach a device having an ultrasound device provided in its longitudinal portion that is adapted to deliver therapeutic ultrasound through the outer surface of the longitudinal portion to the target tissue.

Referring to FIG.1, Dobak concerns the use of a heat transfer catheter wherein the distal end of the tube has a working fluid inlet tube 105 surrounded by an outlet lumen 103. This constructions allows a working fluid 107 to travel distally to the tip of the catheter via the inlet tube and return proximally to be re-heated. As shown clearly in

FIG. 10, the working fluid supply 16 is located far proximal that it is outside the patient's body. Since none of Dobak's description shows a means for heating the working fluid within the catheter, it is reasonable to conclude that Dobak's working fluid is likely heated in the working fluid supply 16. Therefore, even if one were to find motivation for heating Dobak's working fluid via ultrasound (which is found in neither document), the skilled artisan would likely place the ultrasound device is the working fluid supply 16.

Knowlton does not cure this deficiency. Although Knowlton teach the use of ultrasound heating in a catheter, Knowlton teaches that the purpose of the ultrasound unit is to directly heat tissue outside of the catheter, not heat a fluid located within the catheter. Accordingly, a skilled artisan seeking to heat Dobak's working fluid would have no motivation to do so with Knowlton's tissue-heating ultrasound.


Indeed, in view of the fact that ultrasound is typically used to direct energy to a focal point and heat that point, while the Dobak device desires an even heating all about the periphery of the outlet tube 103, it is not surprising that Dobak does not describe the use of ultrasound as a heating means.

For this reasons, the present rejection should be withdrawn.

In addition, please provide any additional extensions of time which may be necessary and charge any fees which may be due to Deposit Account No. 10-0750, but do not include any payment of issue fees.

Should there be any remaining or further questions, the Examiner is requested to place contact the undersigned directly.

Respectfully submitted,



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